

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

VN 200 4040.3A

6/25/99

### AVIATION SYSTEM STANDARDS FLIGHT INSPECTION OPERATIONS

#### SUBJ: Flight Inspection Proficiency and Standardization Evaluation Program

- 1. **PURPOSE.** This order describes the flight inspection evaluation process, sets standards and requirements, and establishes performance criteria for evaluating flight inspection crewmembers during conduct of flight inspection mission operations. Analysis of crew performance will be the basis for identifying program and support activity shortfalls, adequacy of applicable publications and directives, and defining training needs.
- **2. DISTRIBUTION.** This order is distributed to all employees in the Flight Inspection Operations Division, Aviation System Standards; Detachment 1, Air Force Flight Standards Agency; and to the Aviation Systems Branch, FAA Academy, Mike Monroney Aeronautical Center.
- **3. CANCELLATION.** Order VN 200 4040.3, Flight Inspection Proficiency, Standardization, and Evaluation, dated May 1, 1998, is canceled.
- **4. BACKGROUND.** The Flight Inspection Operations Division, AVN-200, is responsible for aircrew proficiency and standardization of flight inspection operations. This shall be accomplished through an active Flight Inspection Mission Proficiency and Standardization Evaluation Program as directed by this order.
- **5. APPLICATION.** The Flight Inspection Technical Support Branch, AVN-210, is the Office of Primary Responsibility (OPR) for the implementation, administration, and program oversight for the Proficiency and Standardization Evaluation Program. AVN-210 is responsible for designating qualified personnel as Flight Inspection Standardization and Mission Evaluators. Program components and specific subject areas are contained in Appendix 1, Standardization Program; Appendix 2, Flight Inspection Mission Evaluation; Appendix 3, Definitions; Appendix 4, Airborne Electronics Technician (ET) Mission Evaluation Standards; Appendix 5, Pilot-In-Command (PIC) Mission Evaluation Standards; Appendix 6, References; and Appendix 7, VN Form 4040-3, Flight Inspection Evaluation Record.
- **6. FLIGHT INSPECTION MISSION CERTIFICATION.** Flight Inspection Evaluator and Basic Flight Inspection Certification shall be conducted in accordance with Order VN 8240.3, Certification of Flight Inspection Personnel. Only those personnel certificated by the Flight Inspection Operations Division, AVN-200, per paragraph 5, shall conduct flight inspection standardization and mission evaluations.

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Distribution: A-W(VN-200)-8; HQ AFFSA, DET 1 (10 copies); Initiated By: AVN-210

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#### **APPENDIX 1. STANDARDIZATION PROGRAM**

The Standardization Program examines the entire flight inspection program, to include crew support activities or functions. This appendix outlines the standardization evaluation process and the areas of interest.

- 1. <u>SCHEDULING</u>. Standardization Evaluations shall be scheduled and coordinated with the employee's supervisor and Flight Inspection Central Operations (FICO). Each member of the crew being evaluated should be notified at least 24 hours prior to the evaluation. At least one crew from each Aircrew Resource Location (ARL) shall be evaluated biennially. Crew composition may be from the same or multiple ARL's.
- **2. CRITERION**. The flight inspection crew shall be evaluated collectively as a team. Although the Pilot-In-Command (PIC) and Electronics Technician (ET) are subject to the requirements of the respective Mission Evaluation Standards, the focus of this evaluation should be flight inspection operation standardization, mission requirements, crew interaction, and support activities. This does not preclude the identification of substandard crewmember performance. With the exception of recurrent mission evaluation, no other evaluation shall be conducted concurrently.
- **3. SUPPORT ACTIVITIES**. Functional areas providing direct and/or indirect flight inspection crew support shall be reviewed to the extent of the support. These areas include, but are not limited to, all Flight Inspection Operations Division, AVN-200, organizational branches.
- **4. EVALUATOR RESPONSIBILITY**. Flight Inspection Standardization Evaluators shall examine the overall flight inspection program. In addition to the crew, all functional areas shall be evaluated to ensure compliance IAW Order 8200.1, United States Standard Flight Inspection Manual; TI 4040.50, Aviation System Standards Operations Manual; TI 4040.52, Flight Inspection Standard Operating Procedures Manual; and other applicable flight inspection directives and publications. Evaluators shall serve as an additional crewmember during conduct of flight inspection for the purpose of evaluating the primary crewmembers.

NOTE: Under no circumstance shall an evaluator willingly allow a crewmember or crew to engage in an action which is contrary to any statute, regulation, policy, or conventional safety practice. In the course of an evaluation, an evaluator who observes such action being performed, about to be performed, or the possibility of such action being performed by the flight inspection crew, shall immediately notify the crew, so as to terminate or prevent the performance of such action.

- **5. DOCUMENTATION**. Standardization Evaluations will be documented in a written report prepared by the Flight Inspection Technical Support Branch, AVN-210. Completed copies shall be sent to each AVN-200 Branch Manager responsible for correcting noted discrepancies. Written response and/or corrective action shall be forwarded to AVN-200 and to the Director of Operations, AVN-201, through AVN-210. Suspense for written responses is 30 days from receipt of the evaluation form.
- **6. EVALUATION.** As a minimum, the evaluation shall encompass the following areas:
- **a.** Crew qualification and training requirements IAW Order 4040.9, FAA Aircraft Management Program, and TI 4040.50.

- **b.** Weekly flight inspection mission schedule issued IAW TI 4040.50.
- **c.** Currency of flight inspection directives and Aircrew Information File (AIF), to include AVN-200 website document audit.
  - d. Flight Release Action IAW TI 4040.50.
  - e. Flight inspection pre-mission, mission, and post mission requirements, IAW TI 4040.52.
- **f.** Technical product review to include, but not limited to, Daily Flight Logs (DFL's), NOTAM's, National Flight Data Center (NFDC) letters, procedure packages, facility folders, and flight inspection reports and recordings.
- **g.** Review of automated flight inspection software products, i.e., flight inspection reports, DFL's, etc.
- **h.** Functional areas providing crew support, i.e., FICO, Technical Support, Crew Records administrative, etc.
  - i. Crew Resource Management (CRM).

#### **APPENDIX 2. FLIGHT INSPECTION MISSION EVALUATION**

This appendix describes the mission evaluation process. It specifies requirements, establishes criteria, assigns responsibilities, and defines mission evaluations. Mission evaluations shall be conducted, to the extent necessary, to determine the flight inspection competence of the employee, with safety being the primary consideration.

1. <u>SCHEDULING</u>. Mission evaluations shall be scheduled and coordinated with the employee's supervisor, Flight Inspection Central Operations (AVN-250), and the flight inspection crew. The employee shall be notified prior to initial and re-certification mission evaluations, without exception. Recurrent mission evaluation is normally scheduled; however, it may be unscheduled (no-notice to the employee) but only at the request of the employee's supervisor or the Manager, Flight Inspection Operations, AVN-200.

Prior to scheduling an evaluation, the employee shall complete all applicable training requirements in accordance with FAA Order 4040.9, FAA Aircraft Management Program; TI 4040.50, Aviation System Standards Operations Manual; and TI 4040.51, Flight Inspection Training Manual.

**2.** <u>CRITERION</u>: The employee must demonstrate mastery of each TASK in the standard (see Appendixes 4 and 5). Minor deviations caused by inexperience or inadvertent lapse of memory should not normally influence the results of an evaluation. However, the number of deviations, seriousness of the error, repeated occurrences, and similar deviations will be considered in the final analysis of the evaluation. Minimum standard of performance is achieved when the requirements of FAA Order 8200.1A, United States Standard Flight Inspection Manual, are met and the correct status is determined for the facility being flight inspected. These requirements include, but are not limited to, flight profiles, parameters, tolerances, tolerance application, and facility status.

During the evaluation, the employee may be administered an oral exam to cover items that were not or are not normally demonstrated, i.e., knowledge of flight inspection terms, ability to work formulas, publication familiarity, etc.

During the inflight portion of the evaluation, the Electronics Technician (ET) is responsible for the recorded technical data associated with the flight inspection. The Pilot-in-Command (PIC) is responsible for ensuring the detailed flight inspection profiles and maneuvers are accomplished in accordance with the flight inspection requirements. In addition, the PIC is responsible for interpretation of the checks as they relate to support of the NAS and instrument flight procedures.

When the evaluator determines the employee's performance of any TASK is unacceptable, the result of the evaluation is unsatisfactory. The evaluator may correct minor deviations relating to inexperience without interrupting the evaluation. Evaluators should not repeat TASKS that have been attempted and failed; however, when the evaluator determines that a TASK is incomplete, or the outcome uncertain, the evaluator may require the employee to repeat the TASK, or portions of the TASK. This provision has been made in the interest of fairness and does not suggest that this practice be routinely permitted during the evaluation process. When a failure occurs, the evaluator may continue the evaluation until the end of the flight to complete other TASKS. If evaluator intervention becomes necessary to successfully complete a flight inspection, or if the evaluator determines that the entire evaluation must be repeated, the evaluation should be terminated immediately. Following a failure, the evaluator shall notify the employee's supervisor as soon as possible, and the supervisor will determine if subsequent evaluation should continue to complete other TASKS. Whether the evaluation continues or not after a failure, the employee must be informed of the evaluation result and shall be credited for those TASKS performed satisfactorily. However, during

the re-evaluation and at the discretion of the evaluator, any TASK being demonstrated may be evaluated, including those previously passed.

When the evaluation is discontinued for reasons other than unsatisfactory performance (i.e., equipment failure, weather, sickness, etc.), the completed TASKS shall be clearly identified and documented on VN Form 4040-3, Flight Inspection Evaluation Record (Appendix 7). The employee shall be debriefed upon termination of the evaluation, regardless of the outcome.

The employee's supervisor shall determine the type of evaluation an employee will receive following an extended absence from flight inspection.

- **TRAINING**. With the exception of military requirements, training shall not be conducted concurrently with an evaluation. When an evaluation is terminated due to unsatisfactory performance, the inspection may be continued as a training mission while on facility, at the discretion of the evaluator and concurrence of the PIC. Continuation of a scheduled itinerary in a training environment will be coordinated with the approval of the appropriate supervisor(s).
- **4. DOCUMENTATION**. Mission evaluations will be documented on VN Form 4040-3. The evaluation form will be forwarded to the employee's supervisor if the supervisor did not conduct the evaluation. The supervisor shall provide the employee a completed copy of the evaluation form and forward the original to AVN-210 for review and empirical analysis. AVN-210 will forward the forms to the Evaluation and Training Branch, AVN-220, for inclusion in the crewmember's aircrew folder. If applicable, AVN-210 shall issue the appropriate certifications IAW Order VN 8240.3.

#### 5. TYPES OF EVALUATIONS:

- **a. Initial** certification evaluation encompasses the entire scope of flight inspection knowledge, skill, and abilities associated with the crewmember position. This evaluation determines the employee's competence to function as an integral part of a flight inspection crew. The employee must be evaluated, in depth, on all phases of a flight inspection mission, including inspection requirements, principles, and procedures for each NAVAID service. When the scheduled itinerary will not support an inflight evaluation on a particular type facility, and the evaluator deems it unnecessary based on the employee's demonstrated performance of other facilities, an oral evaluation shall be conducted to determine competence of the employee on that system. Following a successful initial evaluation, the employee shall be granted flight inspection certification authority IAW Order VN 8240.3.
- **b.** Recurrent is a periodic evaluation of a certified flight inspection crewmember. This evaluation shall be conducted biennially, not to exceed three years, and will normally be scheduled during the employee's birth month. Observing one complete facility inspection may satisfy requirements for this type evaluation. This evaluation shall include reports completion and review of associated flight inspection documents, i.e., recordings, worksheets, etc. When applicable, Daily Flight Logs (DFL's), NOTAM action, and processing of procedure packages shall be reviewed as an integral part of an evaluation. Failure of this evaluation disqualifies the employee of flight inspection certification authority, and the employee shall not be assigned duties requiring such authority unsupervised. Certification authority shall be reinstated following a successful re-qualification evaluation.
- **c. Re-qualification** is an evaluation to determine the competence of an employee on a task that was previously determined unsatisfactory. Re-qualification evaluation shall encompass the appropriate areas of the mission that were previously found deficient. However, the scope of the

evaluation may be expanded at the request of the supervisor. An in-depth evaluation of the failed task(s) shall be conducted to ensure there is no doubt of the individual's competence. IAW Order VN 8240.3, a Standardization Evaluator shall administer this evaluation, following recommendation for re-qualification by the employee's supervisor.

A Mission Evaluation Board shall be convened for failure to demonstrate satisfactory performance after two successive re-qualification evaluations. Removal from the flight inspection program shall result in permanent loss of flight inspection certification authority.

**6. EVALUATOR RESPONSIBILITY**: The evaluator must determine that the employee meets the objectives of each TASK. To accomplish this requirement, the evaluator shall conduct an evaluation using whatever means necessary to determine that the employee has the skills, knowledge, and abilities associated with the crew position.

NOTE: Under no circumstance shall an evaluator willingly allow a crewmember or crew to engage in an action which is contrary to any statute, regulation, policy, or conventional safety practice. In the course of an evaluation, an evaluator who observes such action being performed, about to be performed, or the possibility of such action being performed by the flight inspection crew, shall immediately notify the crew, so as to terminate or prevent the performance of such action.

Flight inspection mission evaluators shall be assigned IAW Order VN 8240.3. Designated mission evaluators assigned to an Area Resource Location (ARL) should not conduct initial evaluations on individuals assigned to the same ARL. Evaluators may not conduct re-certification evaluation on individuals with whom they conducted re-certification training.

#### **APPENDIX 3. DEFINITIONS**

#### **DEFINITIONS**:

- **a. Airborne Electronics Technician (ET)**: A flight inspection certified technician. The military equivalent is Electronics Technician.
- **b.** Airspace System Inspection Pilot (ASIP): A flight inspection certified pilot. The Pilot-In-Command (PIC) shall be a certified ASIP during conduct of flight inspection missions.
- **c.** Crew Resource Management (CRM): "..refers to the effective use of all available resources; human resource, hardware, and information." It is not a single TASK, but rather a set of skills, which must be evident in all TASKS, to be successful. The standards for CRM, as stated and applied, are subjective; therefore, evaluator Pass/Fail judgments based solely on CRM issues must be carefully considered.
  - d. Employee: Refers to a person, either in training or certified as an ASIP or ET.
  - e. Familiarity: Aware of the requirement and able to research the subject.
- **f. Knowledgeable/Proficient**: From memory, or the ability to directly refer to the appropriate directive and the application of the requirement without delay.
- **g. Mission Evaluation Board**: A committee appointed by AVN-200 to conduct evaluation reviews pursuant to Appendix 2, paragraph 5c. The board shall consist of, but not be limited to:
  - (1) Manager, AVN-200, or designated representative (Member)
  - (2) Manager, AVN-210, or designated representative (Member)
  - (3) Chief Pilot (Member)
  - (4) Employee's supervisor (Member)
- (5) Flight Inspection Standardization Mission Evaluator that conducted the evaluation (Observer)
  - (6) Union representation (Observer)

**NOTE**: The military commander/operations officer, or designated representative, will be an active (Member) where their crewmembers are involved.

- **h. Mission Evaluator.** Determines employee's competence in the flight inspection mission and ability to function in a crew environment. Mission evaluators are assigned IAW Order VN 8240.3. The military equivalent is a Flight Examiner.
- **i. Standardization Evaluator.** Examines the flight inspection program in its entirety. Evaluates scheduling, dispatch, mission operation, flight inspection requirements, documentation, directive compliance, safety, and Crew Resource Management processes. Also, identifies program shortfalls and employee performance weaknesses. Standardization Evaluators are assigned IAW Order VN 8240.3. The military equivalent is a Flight Examiner (as directed).

- **j. Supervisor**: Refers to the employee's first-level supervisor or fleet manager. The military equivalent is the commander/operations officer, or their designee.
- **k. United States Air Force Flight Inspection:** The AVN Flight Inspection Mission is augmented and supported by active duty and reserve Air Force personnel. They are required to perform flight inspection aircrew duties as integrated crewmembers in FAA aircraft, as well as duties specific to military operations. Military flight inspection crewmembers are required to meet all applicable FAA flight inspection mission certification requirements and be in compliance with appropriate orders and directives.
- **I. Working Knowledge/Competence**: The crewmember is capable of completing the TASK following a brief review. Minor delays that do not adversely affect the mission are permitted.

# APPENDIX 4. AIRBORNE ELECTRONICS TECHNICIAN (ET) MISSION EVALUATION STANDARDS

#### 1. General:

- a. TASK: Publications. Objective is to determine that the ET:
- (1) Possesses the current publications to accomplish the scheduled itinerary. As a minimum, the following shall be aboard the aircraft on a flight inspection mission:
  - (a) FAA Order 8200.1
  - (b) TI 4040.52
  - (c) TI 4040.55/4040.25(ET)
  - (d) Flight publications
  - (e) Other publications or documents necessary to accomplish the requirements of the itinerary.
- (2) Demonstrates working knowledge of FAA Orders 8200.1, 8240.36, and TI 4040.52 regarding:
  - (a) Purpose
  - (b) Content
  - b. TASK: Crew Resource Management (CRM). Objective is to determine that the ET:
- (1) Demonstrates CRM skills to competently accomplish the mission in a safe, timely, and efficient manner.
  - (2) Utilizes available resources to the extent possible in the decision process.
  - (3) Exhibits sound judgment and common sense in the performance of duties.
- (4) Actively participates in the accomplishment of shared goals appropriate to the crew environment.
  - c. TASK: Safety (Ref. TI 4040.50, TI 4040.52). Objective is to determine that the ET:
    - (1) Maintains a state of safety awareness.
    - (2) Is knowledgeable of the location and use of aircraft emergency equipment.
    - (3) Is knowledgeable of aircraft emergency procedures, duties, and evacuation/egress routes.
    - (4) Monitors aircraft communications to avoid conflicts with flight inspection or air traffic control.
    - (5) Is responsive to questionable or unsafe conditions.
    - (6) Exhibits readiness for contingencies.

#### 2. Flight Inspection Mission

#### a. Preflight:

- (1) **TASK: Pre-mission Planning** (Ref. TI 4040.50, TI 4040.52, FAA Order 8200.1). Objective: Upon receipt and review of the flight schedule, determine that the ET:
- (a) Demonstrates proficiency in retrieving the correct data sheet from the Airport/NAVAID database for each facility or airport on the schedule.
- (b) Is competent in locating and compiling the applicable procedural packages and required facility folders on the schedule.
- (c) Demonstrates working knowledge to ascertain flight inspection requirements for each scheduled inspection, to ensure all necessary equipment, documents, and material are readily available.
- (d) Demonstrates working knowledge of specialized flight inspection requirements to complete the schedule.
  - (e) Participates in the mission briefing.
  - (2) **TASK: Preflight Preparation** (Ref. TI 4040.50, TI 4040.52, TI 4040.55). Objective: When notified that the aircraft is ready for the crew, determine that the ET:
- (a) Properly stores and secures all necessary equipment, documents, publications, personal items, and supplies aboard the aircraft.
- (b) Proficiently conducts preflight checks to determine operational status of the Flight Inspection System (FIS), and associated equipment to support the schedule mission.
  - (c) Completes applicable Before-Takeoff-Checks.

#### b. Inflight:

- (1) TASK: FIS Mission Setup (may be accomplished before takeoff). (Ref. TI 4040.25(ET), TI 4040.50, TI 4040.52, TI 4040.55). Objective is to determine that the ET demonstrates proficiency in:
  - (a) Selecting the correct mode of operation for the facility under test.
  - (b) Displaying and verifying the correct facility data on the Facility Data Page.
- (c) Selecting the proper toggle position, and keying in the correct condition for the check, on the Nav/Test Page (Sierra Profile Setup Menus for the Hawker).
- (d) Reconfiguring the Plot Control Page as required (Printer Plotter Signal List for the Hawker).
  - (e) Printing required data and pages.

- (2) TASK: FIS Operation and Documentation (Ref. Order 8200.1, Order 8240.36, TI 4040.50, TI 4040.52, TI 4040.55). Objective is to determine that the ET:
- (a) Demonstrates the knowledge and proficiency to properly Start/Stop the FIS before and after the check, as appropriate.
  - (b) Exhibits the knowledge to verify proper FIS operation during the check.
  - (c) Properly annotates the recording during the check.
  - (d) Is capable of identifying signal anomalies on the recording.
- (e) Correctly performs manual analysis of the recording traces for checks, such as ground receiver checkpoints, airborne receiver checkpoints, polarization, etc.
  - (f) Proficiently verifies FIS announced data with the recording.
  - (g) Prints the required FIS data on the recording at the end of the check.
- (h) Is competent in analyzing and determining results of checks requiring multiple runs, i.e., Glideslope Mean Width/Symmetry, Localizer Power Ratio, Localizer alignment monitor check, etc.
- (i) Documents all required data for the flight inspection report (as a minimum) on the worksheet.
  - (j) Correctly determines the status of the check.
- **(3) TASK: Flight Inspection Requirements** (Ref. Order 8200.1). Objective is to determine that the ET:
- (a) Completes, in conjunction with the PIC, all requirements for the type of inspection being conducted.
  - (1) Commissioning
  - (2) Periodic
  - (3) Site Evaluation
  - (4) Maintenance Request Special
  - (5) Procedural Special
  - (6) Other Special Inspections
  - (b) Conducts each check at the proper distance, altitude, and direction from the facility.
- (c) Demonstrates working knowledge of the tolerances and Maintenance Alert limits, and correctly applies it to the parameters.
- (d) Is competent in the application of "en route criteria," "95% rule," and tolerance exception requirements.
- **(4) TASK: Facility Status** (Ref. Order 8200.1). Objective is to determine that the ET, in coordination with the PIC, is competent in:
  - (a) Assignment of facility or SIAP status at the conclusion of the inspection.
  - (b) Establishing facility restrictions.
  - (c) NOTAM requirements as a result of the inspection.

#### c. Postflight:

- (1) TASK: Postflight Requirements (Ref. Order 8200.1, Order 8240.36, TI 4040.50, TI 4040.52). Objective is to determine that the ET:
- (a) Competently briefs facility maintenance and/or air traffic personnel of inspection results, as appropriate.
  - (b) Documents aircraft and FIS discrepancies in the aircraft flight log.
- (2) TASK: Flight Inspection Documentation (Ref. Order 8200.1, Order 8240.36, Order VN 200 8240.4, TI 4040.50, TI 4040.52). Objective is to determine that the ET:
- (a) Prepares and submits flight inspection reports that accurately reflect the facility status and/or SIAP performance data.
  - (b) Properly documents and processes facility data sheet changes or corrections.
- (c) Ensures the recordings are properly annotated, combined with other required documents, and processed for filing.

## APPENDIX 5 PILOT-IN-COMMAND (PIC) MISSION EVALUATION STANDARDS

The following are PIC standards for flight inspection mission evaluation only, and are in addition to the requirements contained in pertinent Federal Aviation Regulations, the Airplane Flight Manual, TI 4040.50, and other directives that are applicable to the operation of FAA flight inspection aircraft.

#### 1. General:

- a. TASK: Publications. Objective is to determine that the PIC:
- (1) Possesses, in addition to the requirements of TI 4040.50, the current flight inspection publications to accomplish the scheduled itinerary. As a minimum, the following shall be aboard the aircraft on a flight inspection mission:
  - (a) Order 8200.1
  - (b) TI 4040.52
  - (c) TI 4040.56
  - (d) Order VN 8240.4
  - (e) Appropriate Aircraft or Company Flight Manual
- (2) Demonstrates working knowledge of Order 8200.1, Order 8240.36, and other pertinent reference publications regarding:
  - (a) Mission preflight requirements
  - (b) Checklist requirements
  - (c) Flight inspection procedures
  - (d) Analysis
  - (e) Tolerances
  - (f) Report completion
  - (3) Exhibits familiarity with all other REFERENCE publications regarding:
    - (a) Purpose
    - (b) Content
  - b. TASK: Crew Resource Management (CRM). Objective is to determine that the PIC:
- (1) Demonstrates CRM skills to competently accomplish the mission in a safe, timely, and efficient manner.
  - (2) Utilizes available resources to the extent possible in the decision process.
- (3) Exhibits sound judgment and common sense in performance of the flight inspection mission.
  - (4) Promotes crew concept to achieve shared goals.

- c. TASK: Safety (Ref. TI 4040.50, TI 4040.52). Objective is to determine that the PIC:
  - (1) Conducts the flight inspection mission with safety as the primary consideration.
  - (2) Ensures mission schedule does not overshadow safe operating practices.
  - (3) Ensures crewmember safety concerns are resolved in a timely manner.

#### 2. Flight Inspection Mission

#### a. Preflight:

- (1) TASK: Pre-mission Planning (Ref. TI 4040.50, TI 4040.52). Objective: Upon receipt and review of the flight schedule, determine that the PIC:
  - (a) Ensures the proper flight inspection documents are assembled and reviewed.
- (b) Ensures that additional items, such as procedure packages, are assembled and reviewed.
- (c) Demonstrates working knowledge of specialized flight inspection requirements to complete the schedule.
- (d) Ensures proper coordination with air traffic and airways facilities personnel, in conjunction with the Flight Inspection Central Office (FICO), is affected.
- (e) Accomplishes necessary briefings with the crew and other participants involved in the flight inspection mission.
- **(2) TASK: Pre-mission Equipment Check** (Ref. TI 4040.50, TI 4040.52, TI 4040.56). Objective is to determine that the PIC, prior to departure:
- (a) Proficiently conducts flight inspection equipment checks to determine their status to support the mission.
  - (b) Properly configures the flight inspection equipment for use.

#### b. Inflight:

- (1) TASK: Flight Inspection (Ref TI 4040.50, TI 4040.52, TI 4040.56). Objective is to determine that the PIC:
- (a) Demonstrates proficiency in configuring the flight inspection equipment and properly executing the inspection maneuver.
- (b) Exhibits working knowledge of aircraft position, direction, and speed requirements for each flight inspection check.
  - (c) Is competent in verifying proper flight inspection equipment operation.
- (d) Proficiently prioritizes mission requirements to ensure safe and efficient accomplishment of the flight inspection.

- (2) TASK: Mission Requirements (Ref. Order 8200.1, TI 4040.52)
  - (a) Completes all requirements for the type of inspection being conducted.
- (b) Demonstrates working knowledge of flight inspection requirements, tolerances, and maneuvers.
- **(3) TASK: Facility/Procedure Status** (Ref. Order 8200.1, Order 8240.36, TI 4040.52). Objective is to determine that the PIC demonstrates the ability:
- (a) To determine if the facility/procedure meets flight inspection tolerance, TERPS criteria, and/or other requirements.
- (b) To properly evaluate facility performance and instrument flight procedure results for required restriction or NOTAM action.
  - (c) To establish facility restriction based on inspection results.
- (d) To perform timely notification of facility or instrument flight procedure status to appropriate authority(ies).

#### c. Postflight:

- (1) TASK: Postflight Requirements (Ref. Order 8200.1, Order 8240.36, TI 4040.50, TI 4040.52). Objective is to determine that the PIC:
  - (a) Competently briefs facility maintenance and/or air traffic personnel as required.
- (b) Proficiently issues the appropriate facility and Flight Data Center (NFDC) NOTAM's, and ensures they have been issued correctly.
  - (c) Properly documents flight inspection equipment discrepancies in the aircraft flight log.
  - (d) Performs postflight crew briefing and FICO notification, as required.
  - (e) Verifies that all publications reflect the current facility status.
- (2) TASK: Flight Inspection Documentation (Ref Order 8200.1, Order 8240.36, Order VN 200 8240.4, TI 4040.50, TI 4040.52). Objective is to determine that the PIC:
- (a) Accurately documents the flight inspection mission on the Daily Flight Log (DFL), and other appropriate forms, as required.
- (b) Demonstrates the ability to competently document and submit facility data and/or instrument procedure changes.
- (c) Is competent in documenting the inspection results on the appropriate flight inspection form.
- (d) Demonstrates competent ability to review, certify, and forward flight procedures packages for further processing.
- (e) Proficiently performs periodic reviews of instrument flight procedures in accordance with Order 8200.1, Section 214.

#### **APPENDIX 6. REFERENCES**

The following (latest revision) are references for this standard:

#### **ORDERS**

- 4040.9, FAA Aircraft Management Program.
- 8200.1, United States Standard Flight Inspection Manual (USSFIM).
- 8200.32, Periodic Flight Inspection Criteria for Aspen, Colorado, Localizer Type Directional Aid (LDA).
- 8200.39, Flight Inspection of Precision Runway Monitors/Final Monitor Aid Display Systems.
- 8200.40, Flight Inspection of Transponder Landing System (TLS)
- **8200.41**, Flight Inspection Evaluation of Differential Global Navigation Satellite Positioning System (DGNSS) Special Category I (SCAT-1) Instrument Approaches Using Private Ground Facilities.
- 8240.32, Request for Request for Flight Inspection Services.
- 8240.36, Instructions for Flight Inspection Reporting.
- 8240.41, Flight Inspection/Air Traffic On-Site Coordination Requirements.
- 8240.47, Determination of ILS Glidepath Angle, RDH, and GPI.
- VN 8200.2, GPS Flight Inspection (GFIS) Operations.
- VN 8200.3, Policy With Respect to Military Program Procedures for Flight Inspection of Foreign-Owned Air Navigation Facilities.
- VN 8240.3, Certification of Flight Inspection Personnel.
- VN 200 4040.3, Flight Inspection Proficiency and Standard Evaluation Program.
- VN 200 8240.4, Daily Flight Log and Load Manifest, FAA Form 4040-5.

#### **TECHNICAL ISSUANCES**

- 4040.25, BAe 125-800A
- 4040.50, Aviation System Standards Operations Manual.
- 4040.51, Flight Inspection Training Manual.
- 4040.52, Flight Inspection Standard Operations Procedures Manual.
- 4040.55, Technician User Manual; FAA Automatic Flight Inspection System (AFIS).
- 4040.56, Pilot User Manual; FAA Automatic Flight Inspection System (AFIS).
- Other current Flight Inspection Operations Division, AVN-200, Notices, Memorandums, and Numbered Technical Guidance associated with the flight inspection mission.

**NOTE:** Publications can be accessed through the Internet at:

http://www.mmac.jccbi.gov/avn/download.html

### APPENDIX 7. VN FORM 4040-3, FLIGHT INSPECTION EVALUATION RECORD

FLIGHT INSPECTION EVALUATION RECORD Ref: Order VN 8240.3			Date of Eval			
Employee(s) (last, first, middle initial)					Other	
				equalification 🗌	Standardization	
			Duty Position			
			Pilot  Name of Evaluator (last, fi	Technician Othe	er	
			Name of Evaluator (last, ii	rsi, madie indaij		
ARL/Branch	Crew Number(s)	Certificate of Authority		Medical Information Date:	Class:	
		FLIGHT INSPECTI	ON EVALUATION			
REMARKS:						
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RESULT OF						
CHECK	Satisfactory	Insatisfactory 🗆 In	complete (Explain in Rer		•	
Signature of Supervisor	Authorizing Eval	Signature of Employee		Signature of Evaluat	or	

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	F		PECTION MISSION		
I. Publication	SAT	UNSA	ION CHECKLIST T IX. RNAV	TSAT	UNSAT
A. Minimum Requirements	107.	01107	A. FMS	13/1	UNSAT
B. Currency	İ		1. Waypoint	<del> </del>	+
C. Knowledge / Familiarity	<u> </u>		2. SIAP		
II. Premission Planning			B. GPS		
A. Requirements/Research	<del> </del>		1. Waypoint		
B. Required Documents/Equip	<del> </del>		2. SIAP		
C. Coordination			3. Tolerance	-	
D. Briefing			X. VGSI (PAPI/VASI/PVAS)	<b>-</b>	_
III. Preflight Preparation			A. Glidepath Angle		
A. Aircraft / FIS Status			B. Angular Coverage		
B. Storage of Equipment / Supplies			C. Obstruction Clearance		
C. Checklist			XI. NDB		
IV. Flt Insp Mission			A. Coverage		
A. FIS Setup / Operation	1		B. Approach		1
B. Checklist Requirements			C. Station Passage		
C. Aircraft Position / Maneuvers			XII. DF		
V. ILS	Î		A. Orbit		
A. Localizer			B. Station Passage		
1. ILS-1			C. Approach		
2. ILS-3			D. Operator Performance	1	
3. Alignment Monitors			E. Communication		
B. Glideslope			XIII. Radar		
1. ILS-2			A. Orientation / Tilt		
2. ILS-3			B. Vertical Coverage		
Clearance Check			C. Approach		
4. Transverse Structure			D. Accuracy		
C. Markers			E. MTI		
1. Minor Axis			F. ATCRBS		
2. Major Axis			XIV. MSAW		
VI. VORTAC			A. Approach Path Monitor		
A. Radial .			B. General Terrain Monitor		
B. Orbit			XV. PAR		
C. Approach			A. Angle / Alignment		
D. Null / Offset			B. Lateral Coverage		
E. GCP / ACP			C. Lower Safe Limit		
F. Align Monitor			D. MTI		
VII. VOT			E. Coincidence		
A. Coverage	ļ		XVI. FAA Order 8200.1 Section 214		
B. Align Monitor			XVII. CRM		
VIII. MLS			XVIII. Safety		
A. Azimuth	ļ		XIX. Post Flight Requirements	ļ	
1. MLS-1			A. Notification / Coordination	1	
2. MLS-2	ļ		1. Maintenance	1	
3. MLS-3	<u> </u>		2. ATC		
4. Alignment Monitors	ļ		3. NOTAMs / NFDC	1	
5. Data Words	1		4. FICO (Maintenance Alert)	1	
6. OCI	<u> </u>	_	5. Procedures Section		
B. Elevation			B. Documentation		
1. MLS-1	ļ	<u> </u>	1. DFL	1	
2. MLS-2	ļ		2. Flight Inspection Report		+ · —
3. MLS-3	<u> </u>		3. Facility Data Change		
4. Clearance					

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